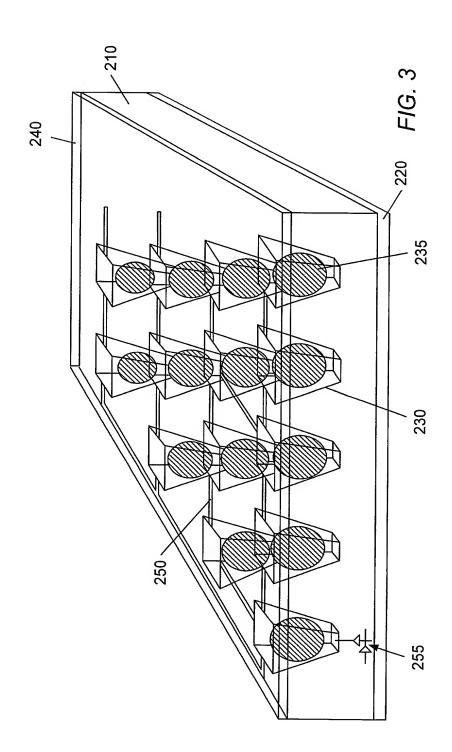


FIG. 2





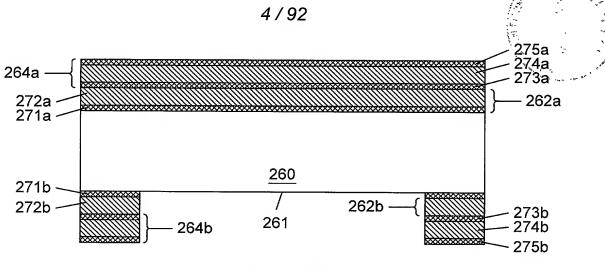


FIG. 4A

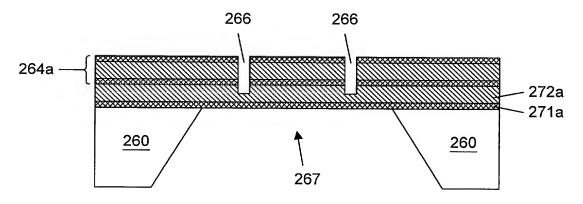


FIG. 4B

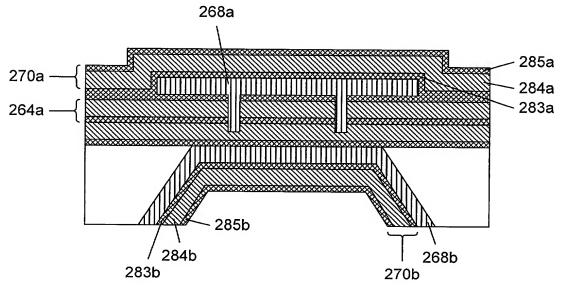


FIG. 4C

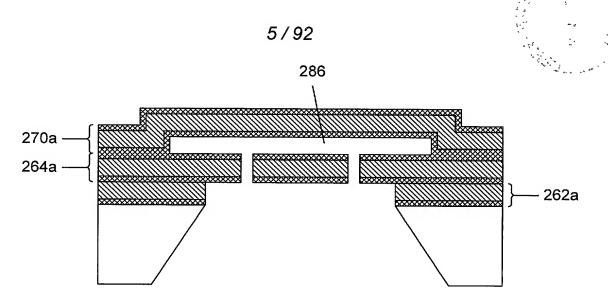


FIG. 4D

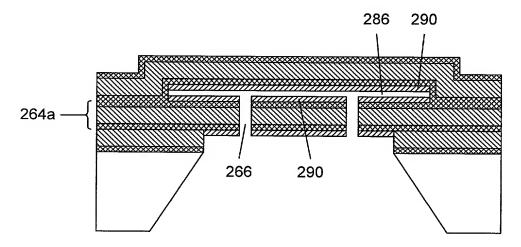


FIG. 4E

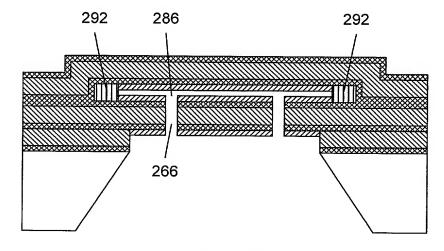
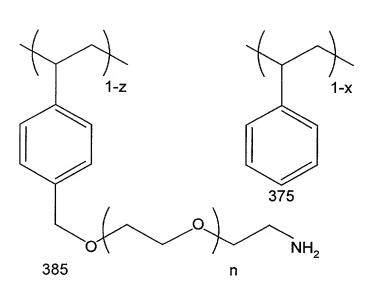


FIG. 4F



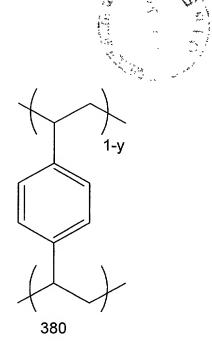
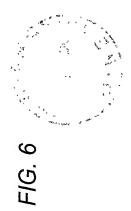
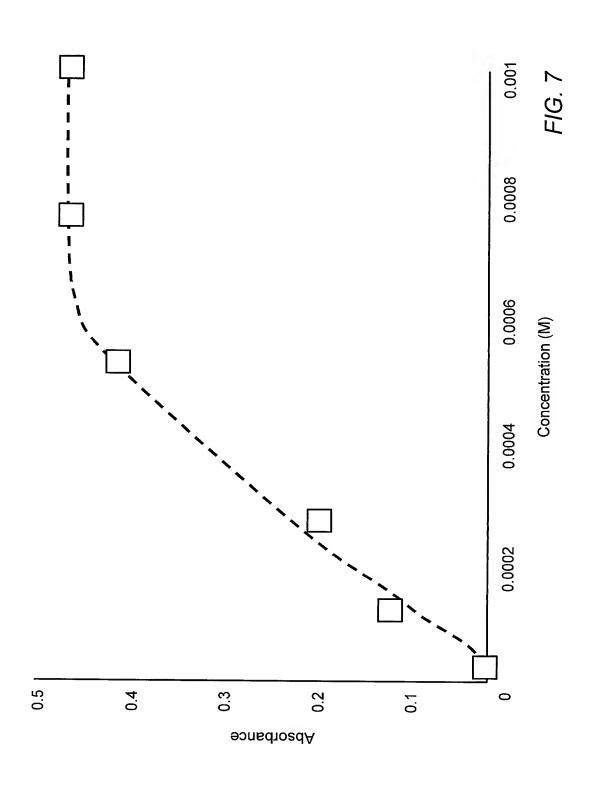


FIG. 5



o-cresolphthalein complexone





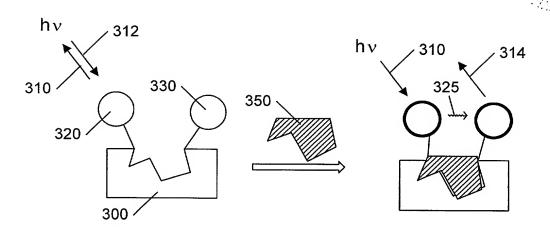


FIG. 8

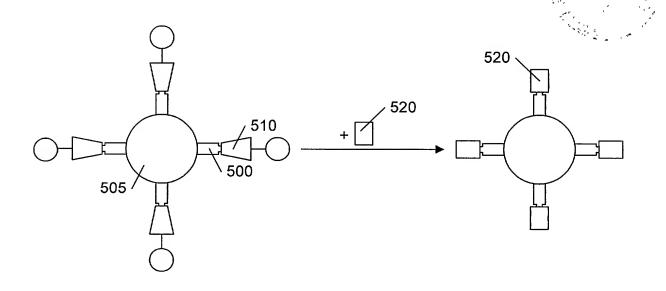


FIG. 9



Peptides

Nucleotides

FIG. 10

$$S = C = N - R_2 - NHtBOC$$

$$420$$

$$R_1$$

$$A = R_2 - NH_2$$

$$A = R_2 - NH_2$$

$$S = C = N - R_3 - NHtBOC$$

$$R_1 O$$

$$N N R_2 N R_3 N R_3 N R_3 N R_4$$

FIG. 11



FIG. 12

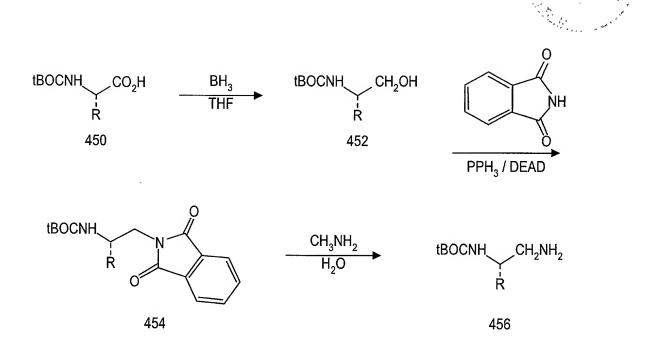
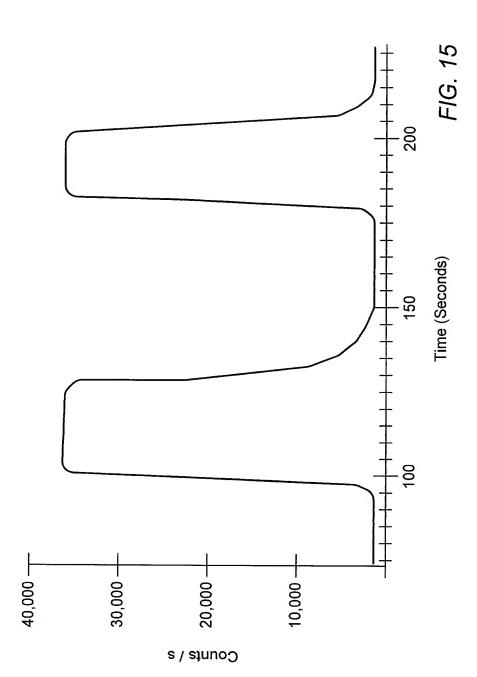


FIG. 13



FIG. 14



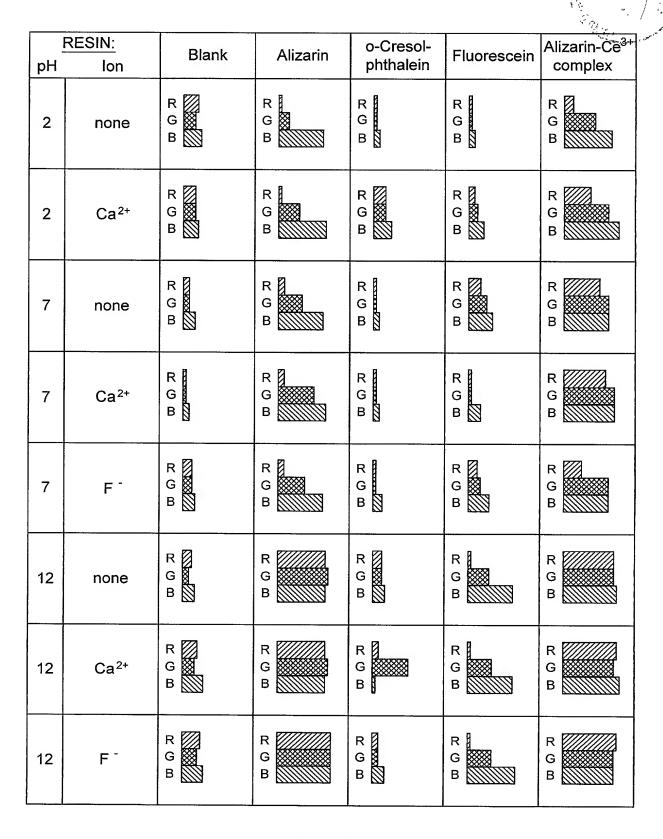


FIG. 16



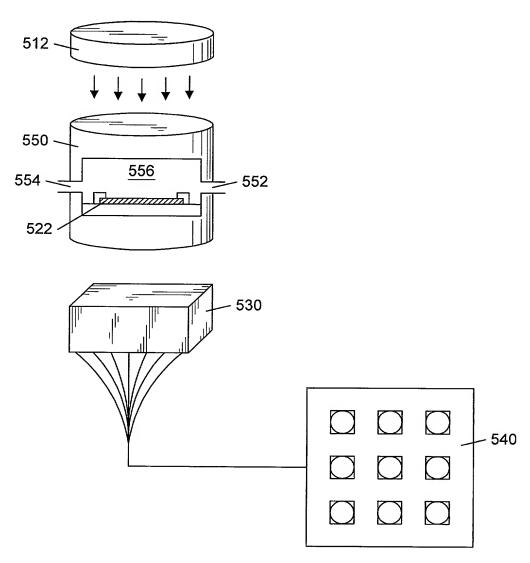


FIG. 17



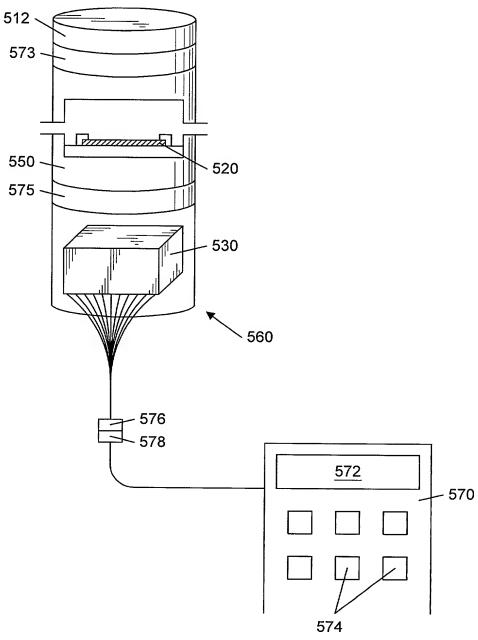


FIG. 18

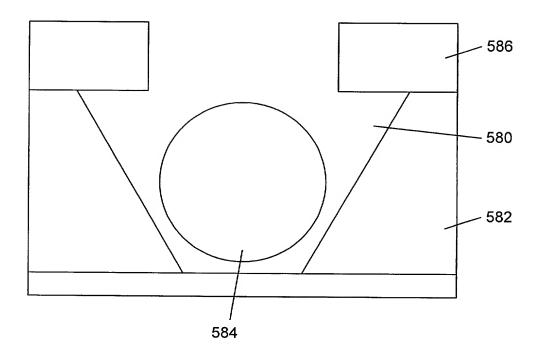
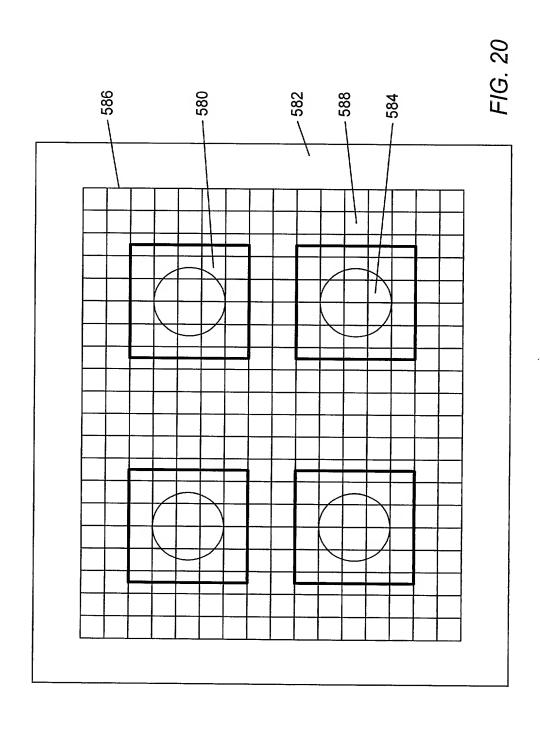


FIG. 19









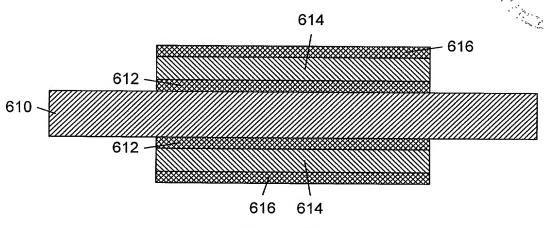
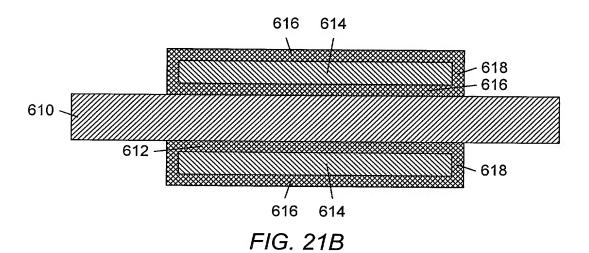


FIG. 21A



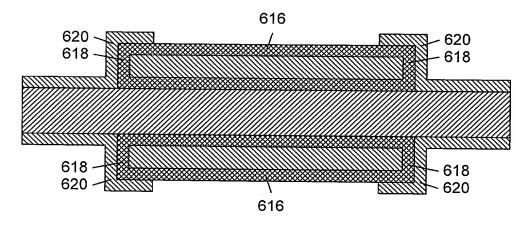


FIG. 21C

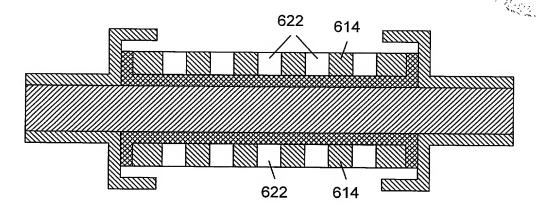


FIG. 21D

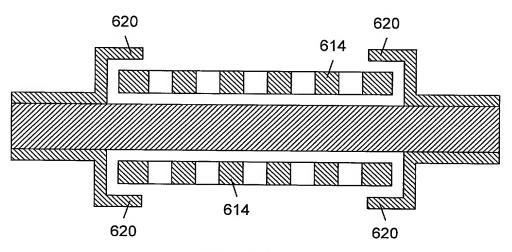


FIG. 21E



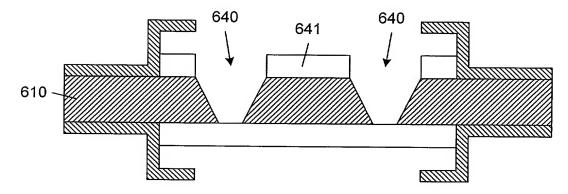


FIG. 21F

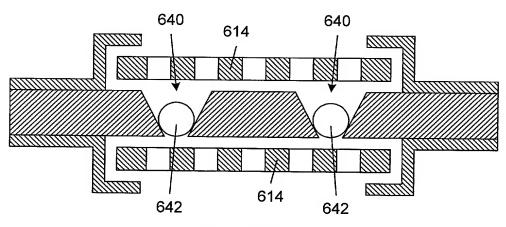
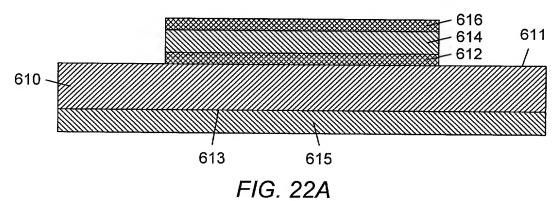


FIG. 21G





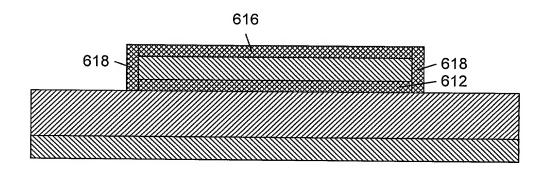


FIG. 22B

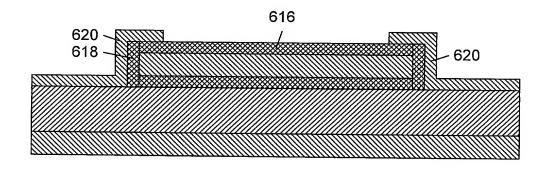
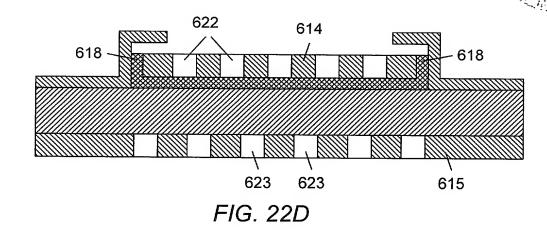


FIG. 22C



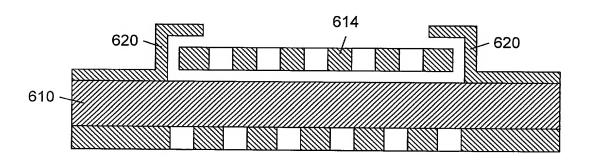


FIG. 22E

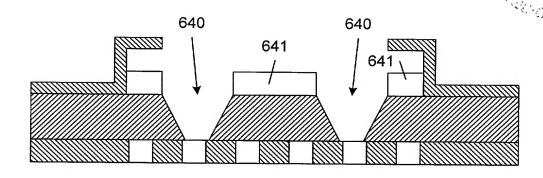


FIG. 22F

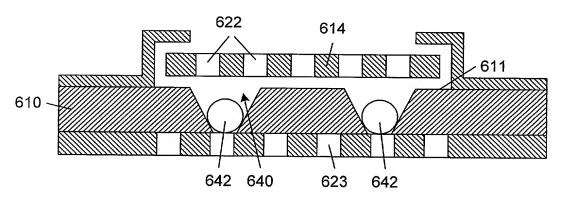


FIG. 22G

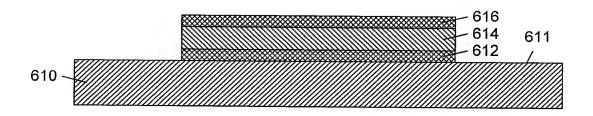


FIG. 23A

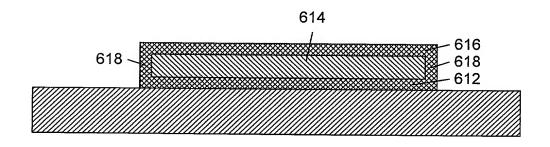


FIG. 23B

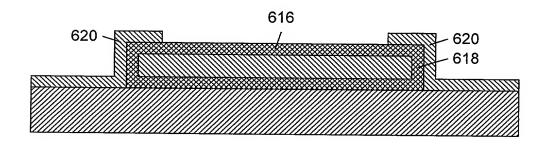


FIG. 23C



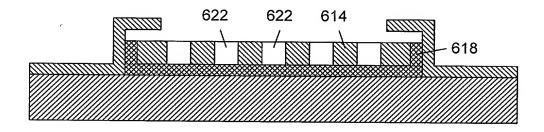


FIG. 23D

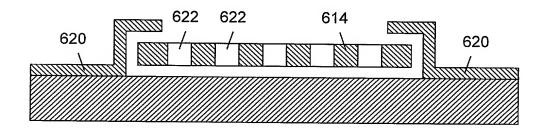


FIG. 23E



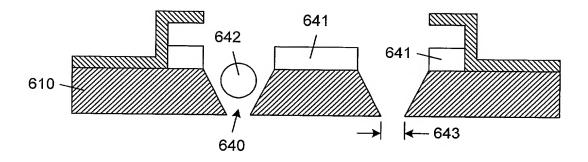


FIG. 23F

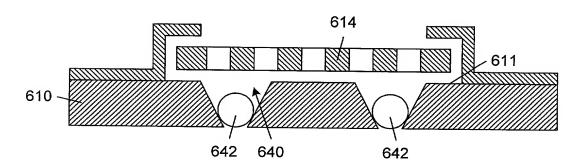
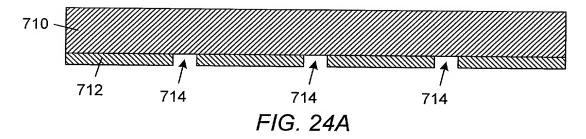
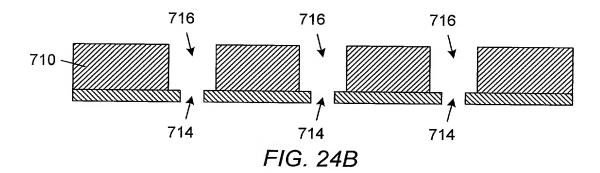


FIG. 23G







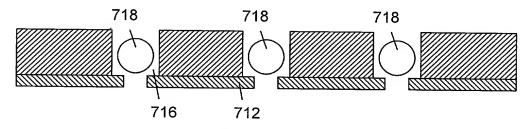


FIG. 24C

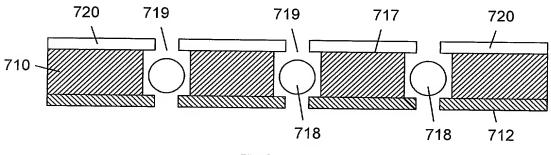
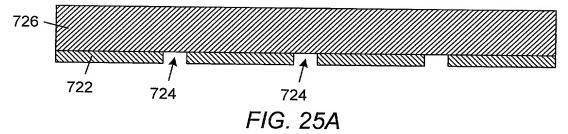
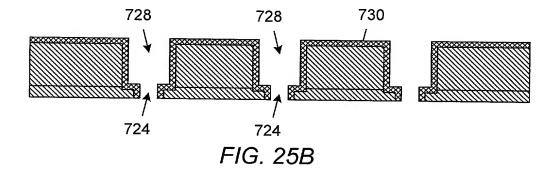
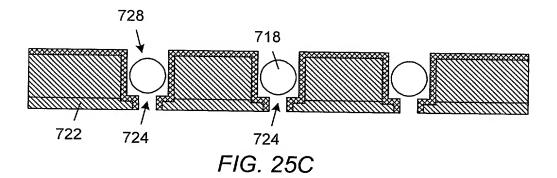


FIG. 24D









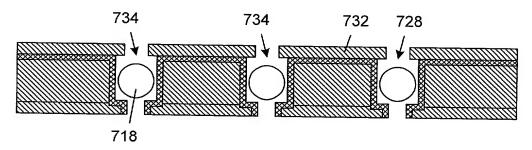


FIG. 25D

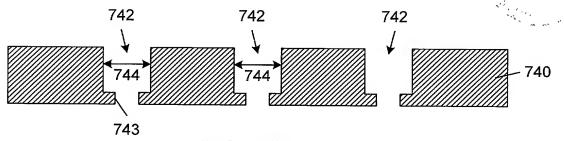


FIG. 26A

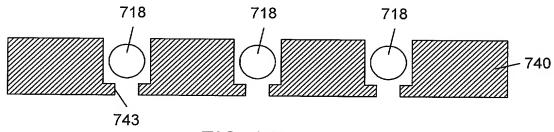


FIG. 26B

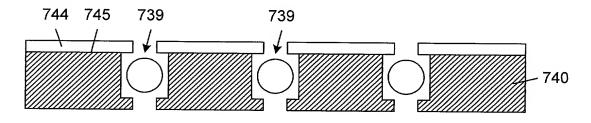
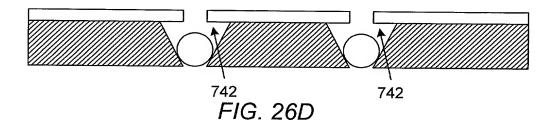


FIG. 26C



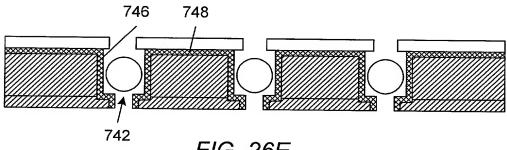


FIG. 26E

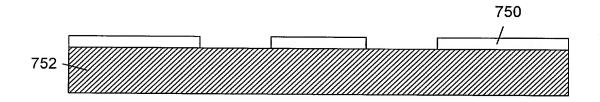


FIG. 27A

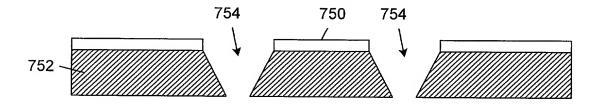


FIG. 27B

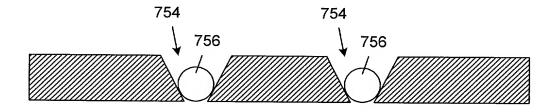
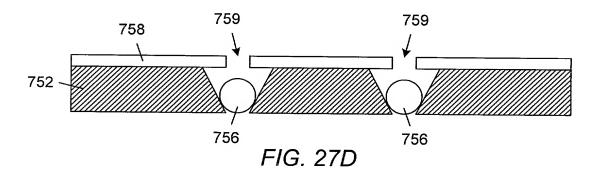
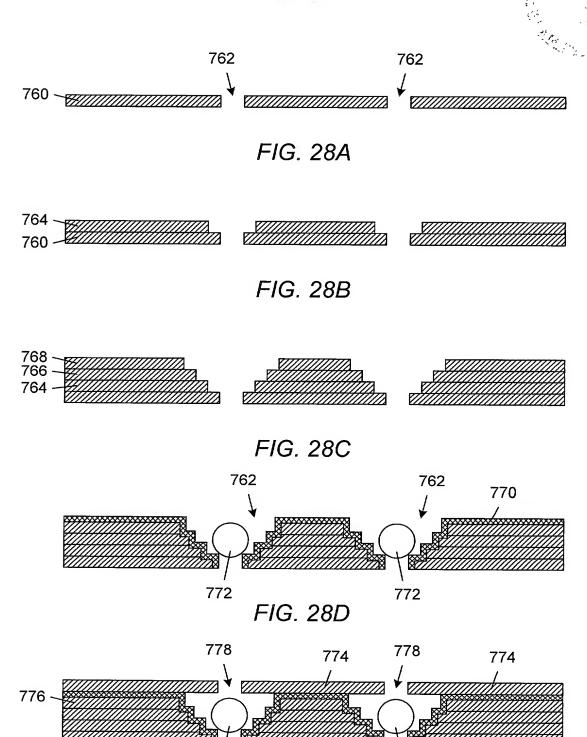


FIG. 27C

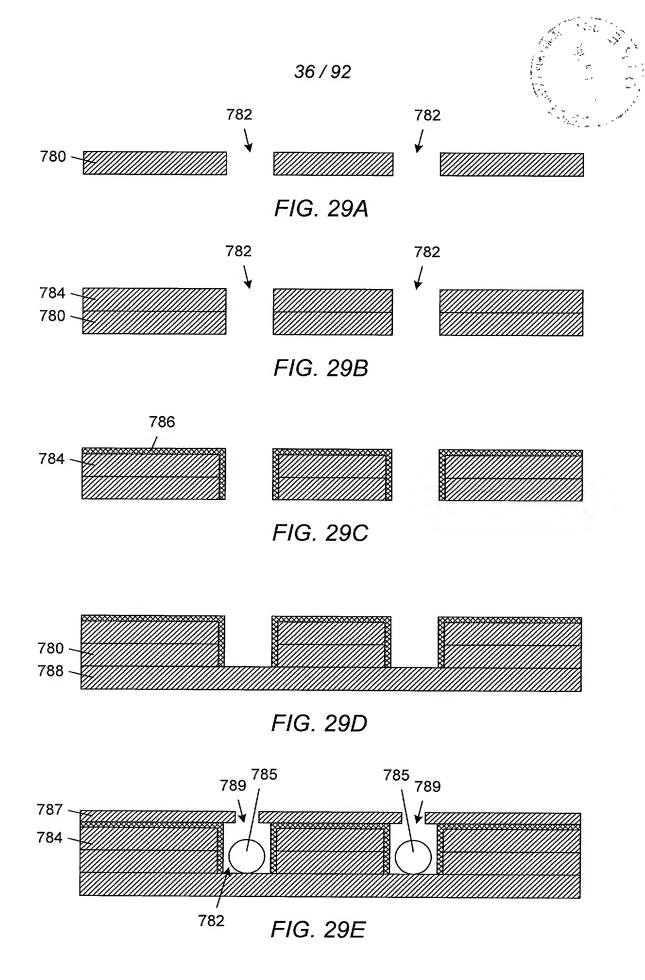




772

FIG. 28E

772



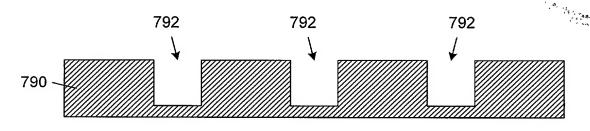


FIG. 30A

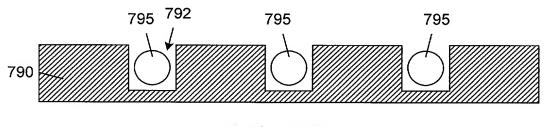


FIG. 30B

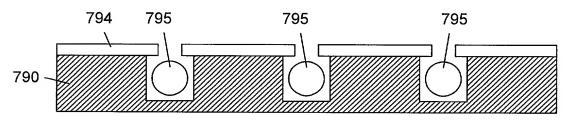


FIG. 30C

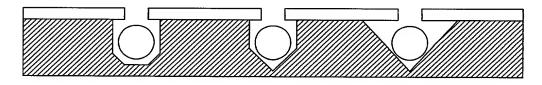


FIG. 30D

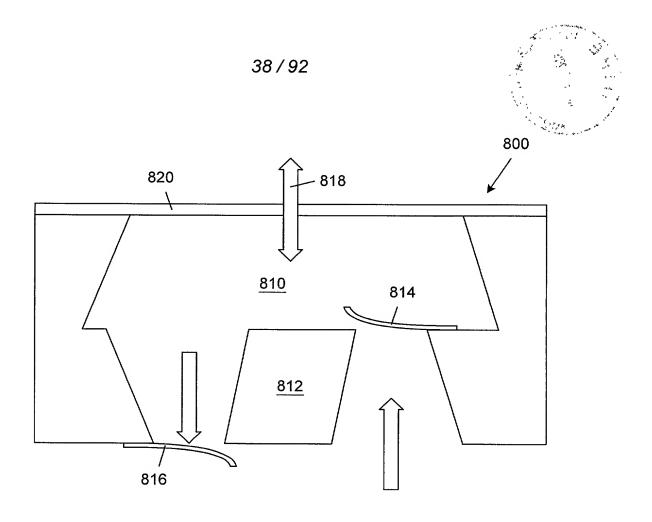


FIG. 31

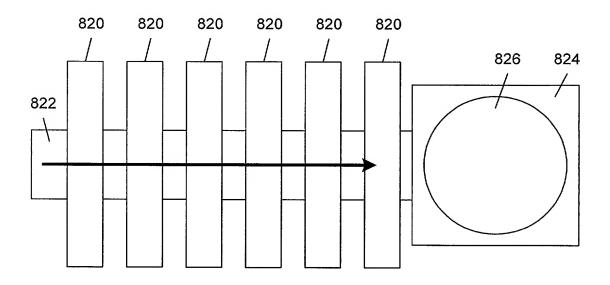
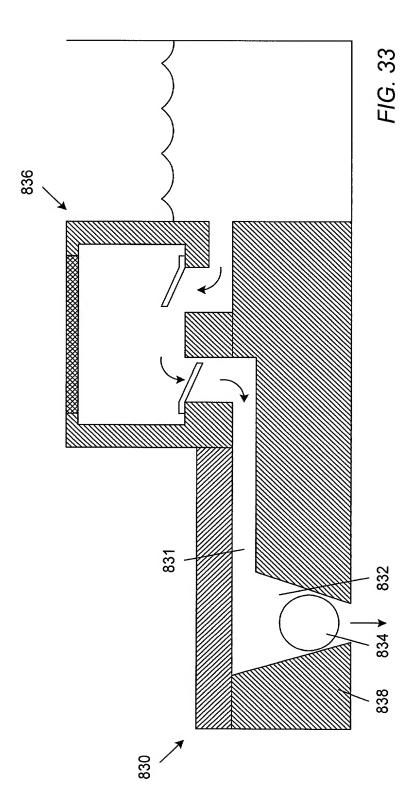
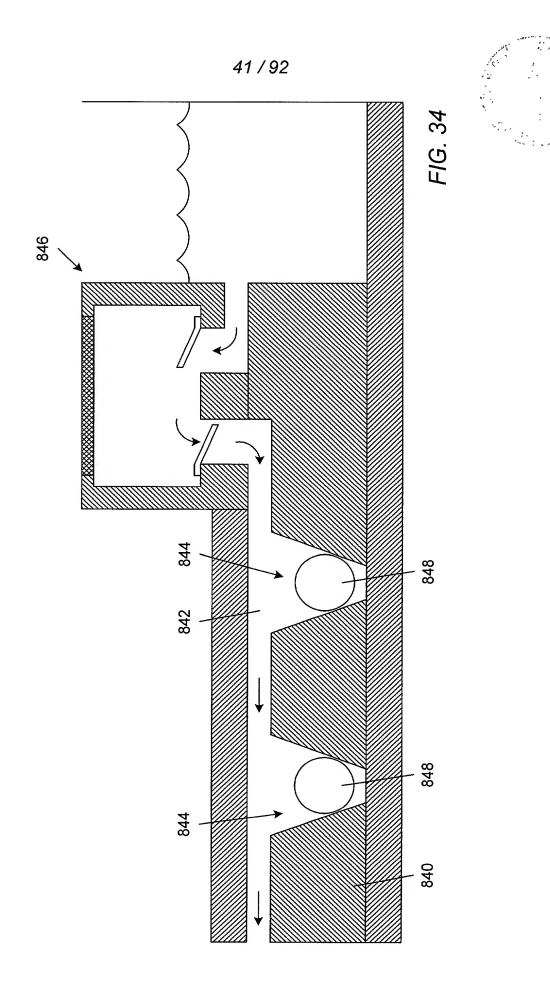


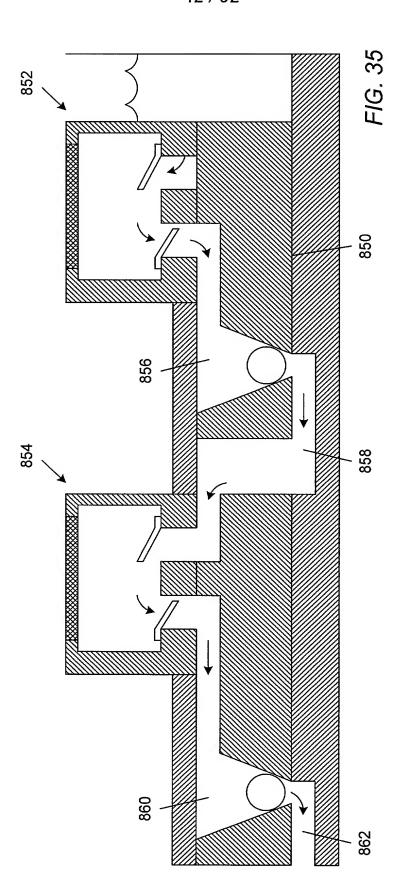
FIG. 32





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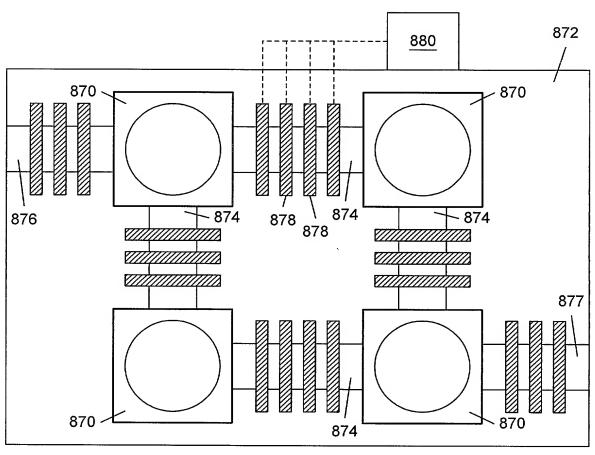
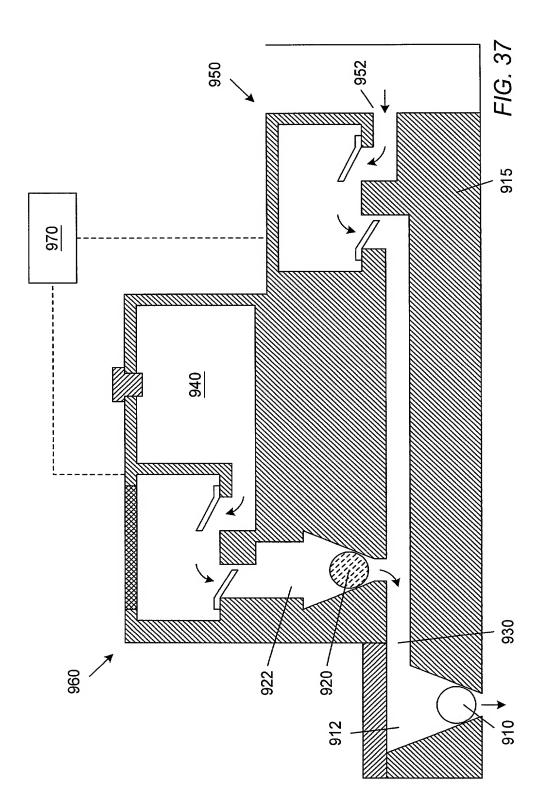
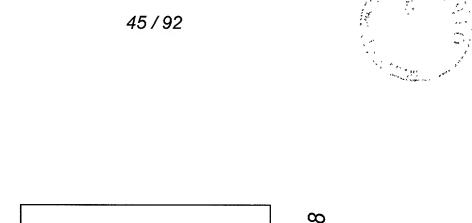
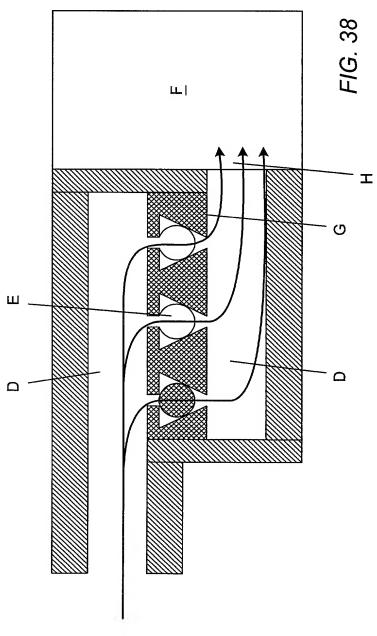


FIG. 36

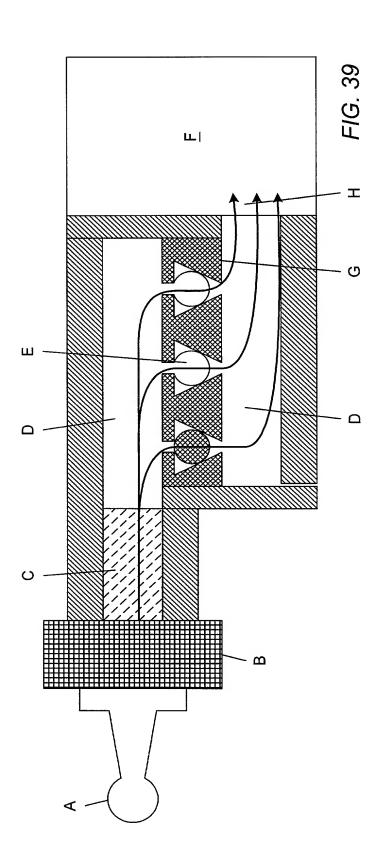


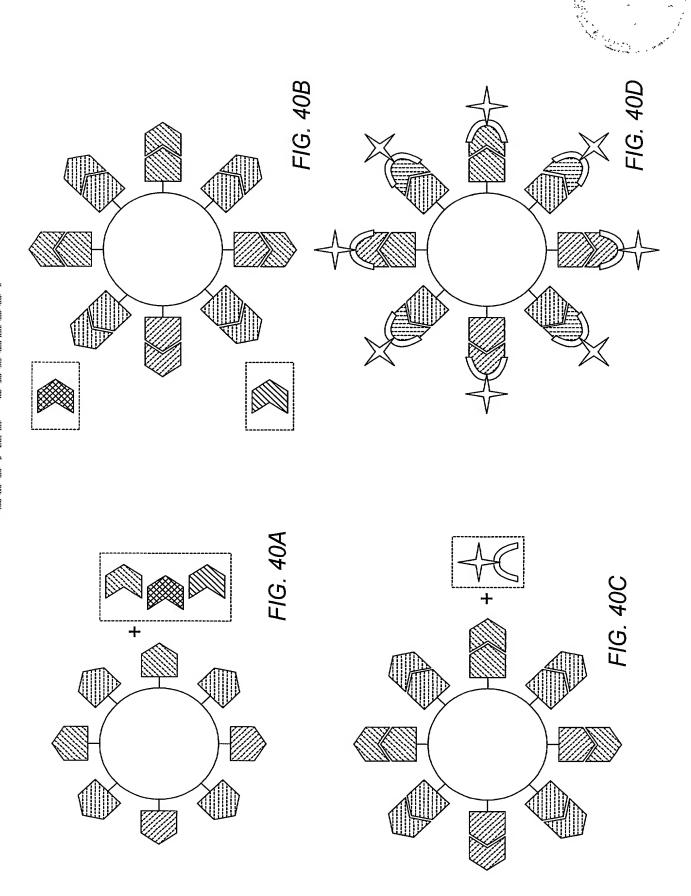


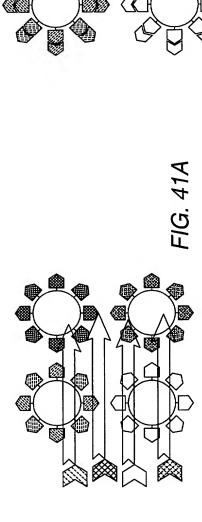


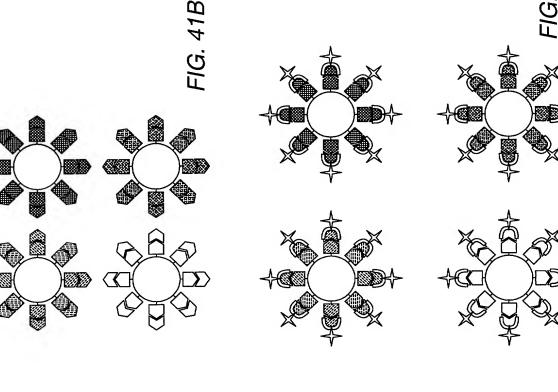


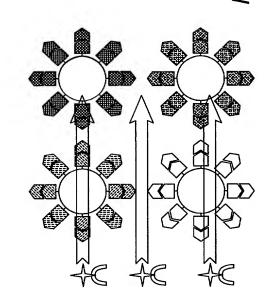




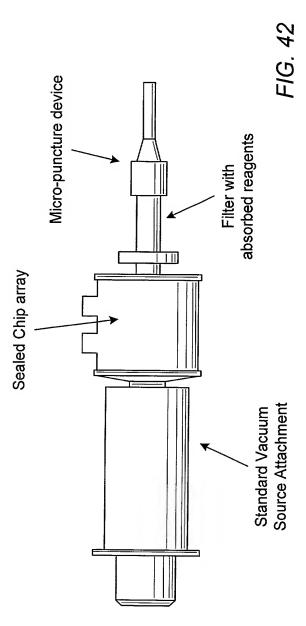




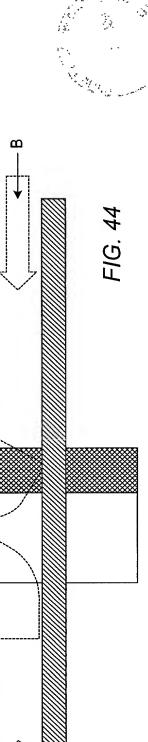


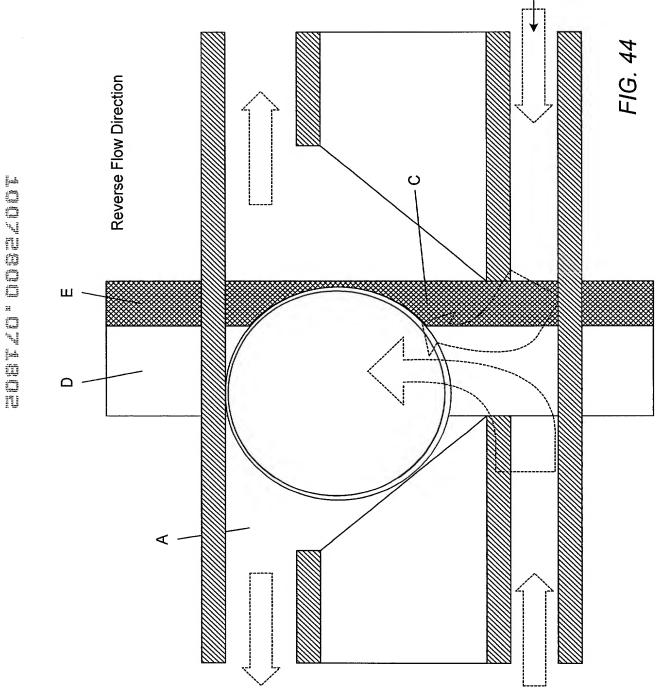














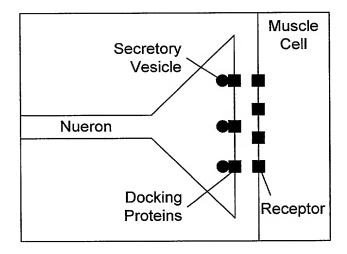


FIG. 45A

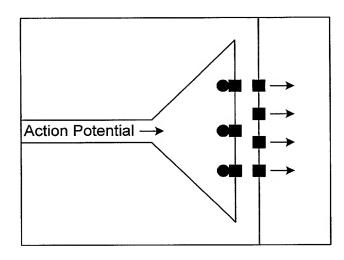


FIG. 45B

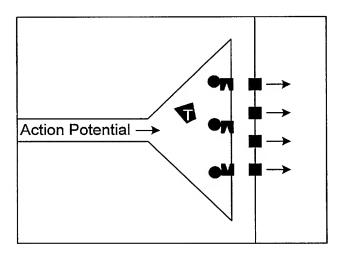


FIG. 45C





FIG. 45D

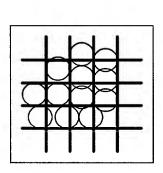


FIG. 46A

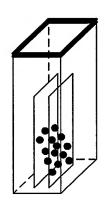


FIG. 46B



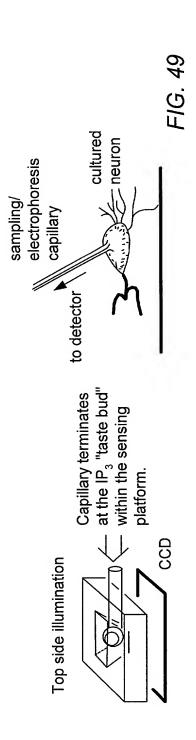


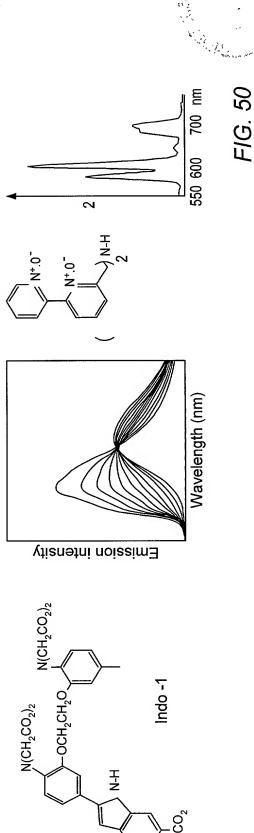
$$\begin{array}{c|c} H & H_{-N} \\ N & H_{-N} \\ N & H \\ \end{array}$$

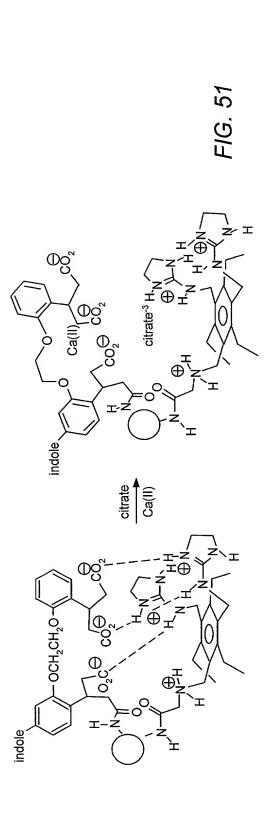
$$\begin{array}{c|c} & & & & \\ & &$$

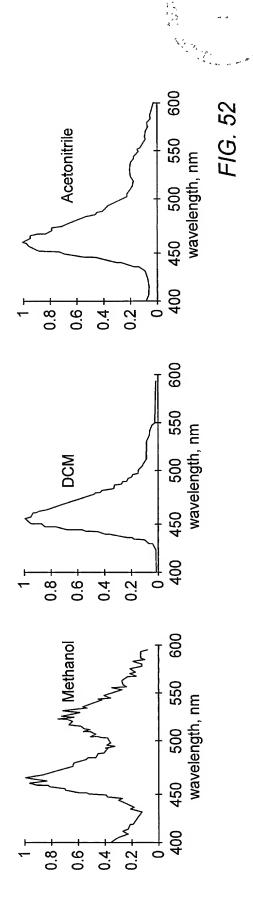
FIG. 47

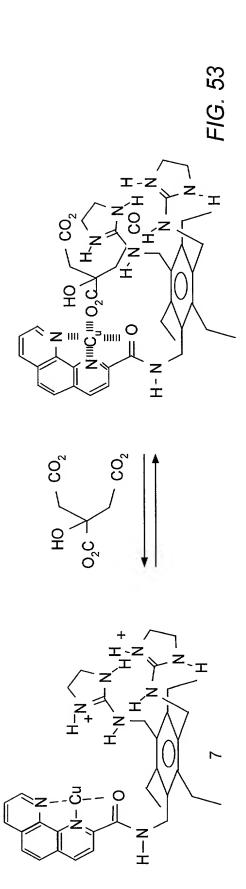
FIG. 48

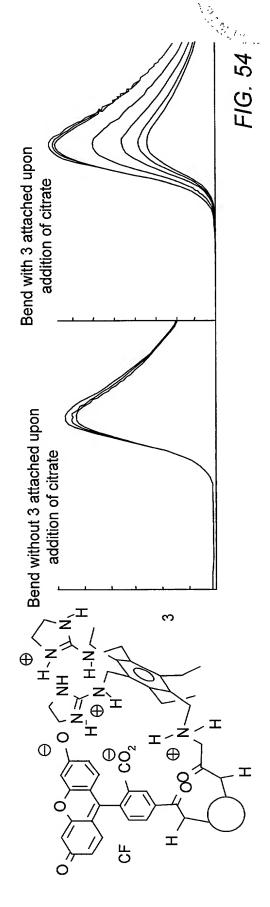
















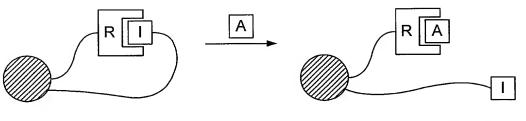


FIG. 55A

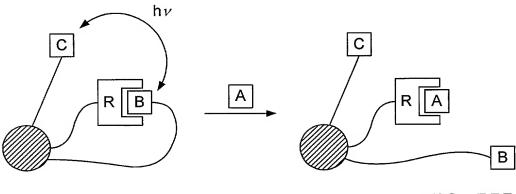


FIG. 55B

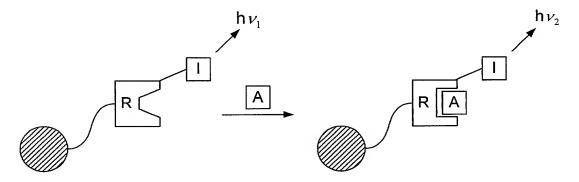


FIG. 55C

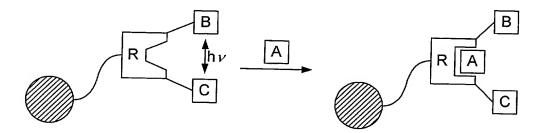
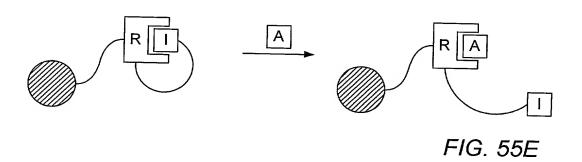
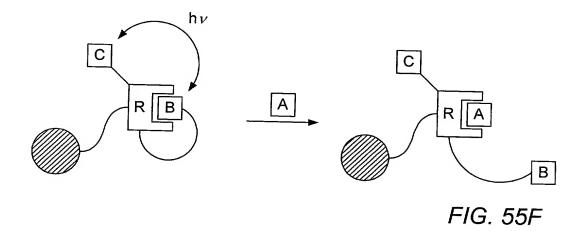


FIG. 55D





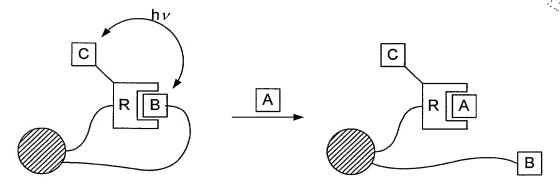
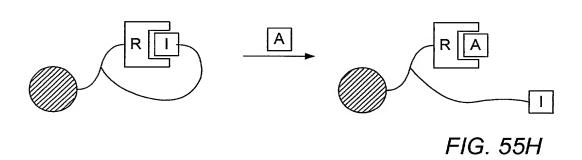


FIG. 55G



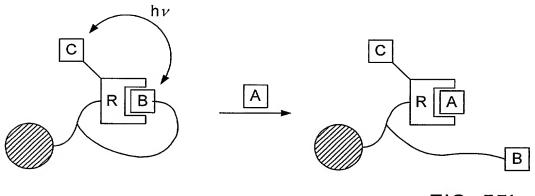
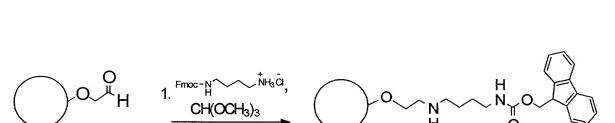


FIG. 551



FIG. 56



6% agarose glyoxalated resin

$$O \longrightarrow N \longrightarrow R_n \qquad 5R = \bigcirc N \longrightarrow N$$

$$6R = \bigcirc N \longrightarrow N$$

2. NaBH4/MeOH

FIG. 57

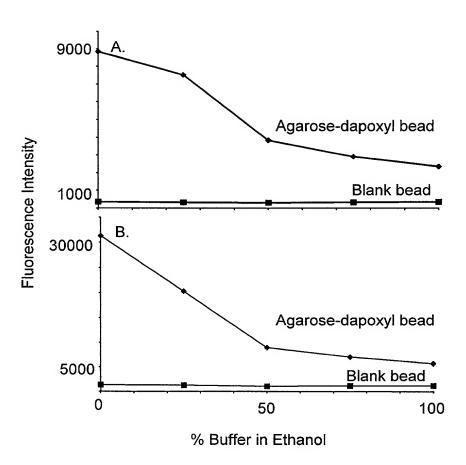


FIG. 58

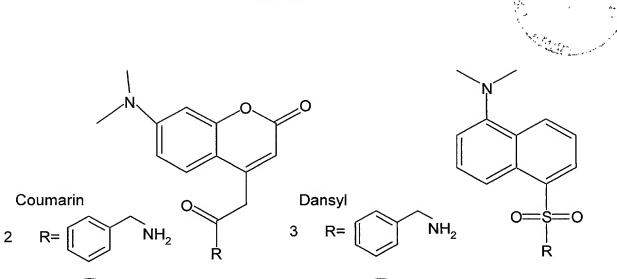
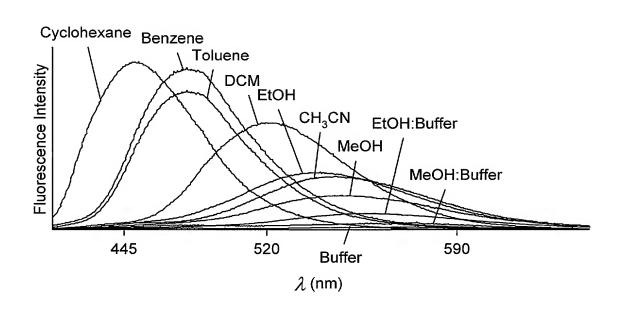
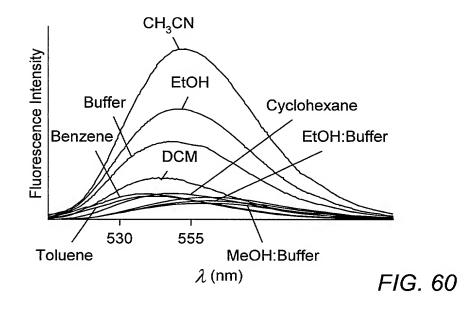
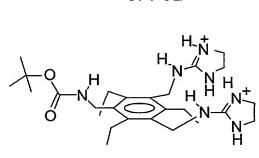


FIG. 59







Guanidinium for anion recognition
base

O

NH

HN

HN

HN

HN

HN

NH

R1

O

NH

R2

NH

R3

Fluorophore attachment site

NH

NH

R3

Fluorophore attachment sites

2:
$$X_1 = X_2 = H$$
 3: $X_1 = X_2 = O$

FIG. 61

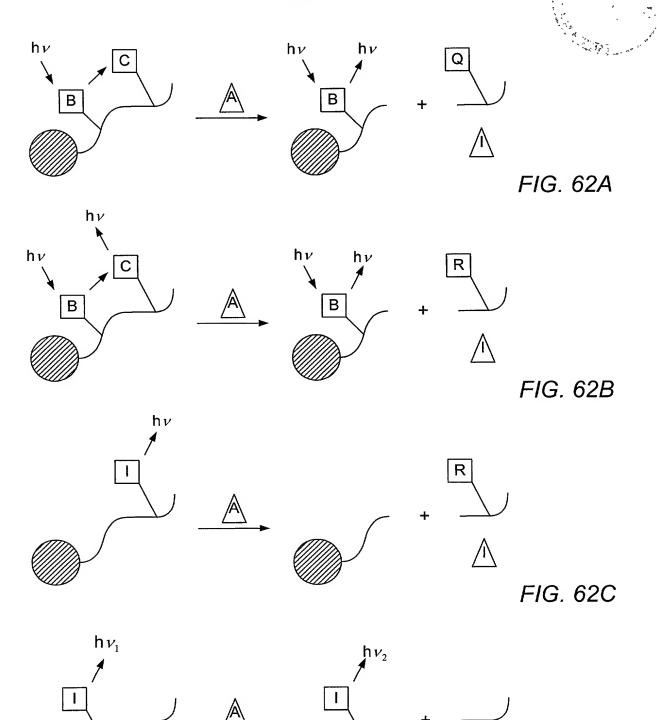


FIG. 62D

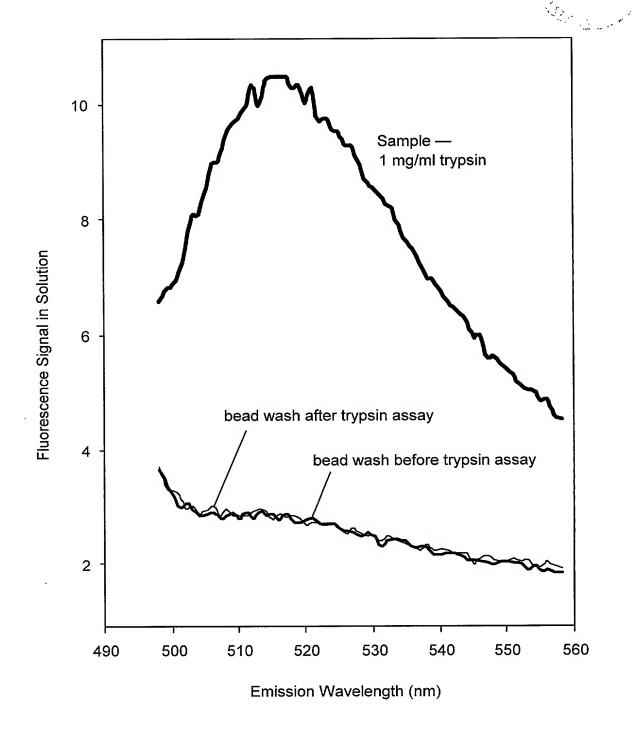
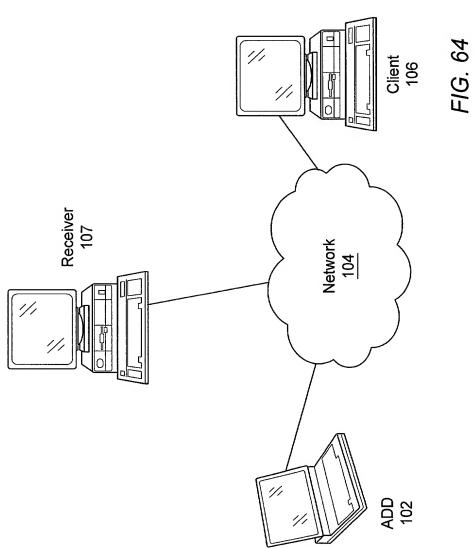
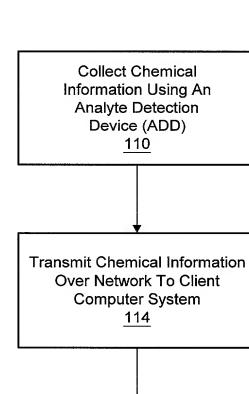


FIG. 63







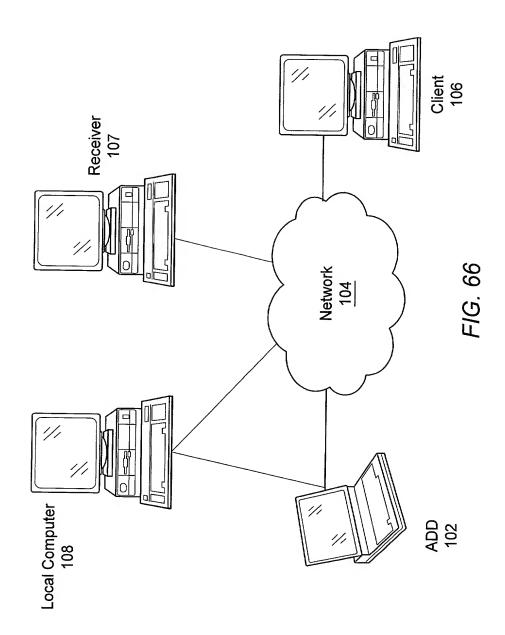


Optionally Transmit Response
Information Over Network From
Client Computer System Back to
ADD Or Other Receiving
Computer System
116

FIG. 65







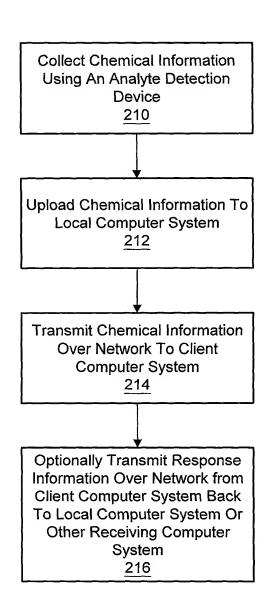
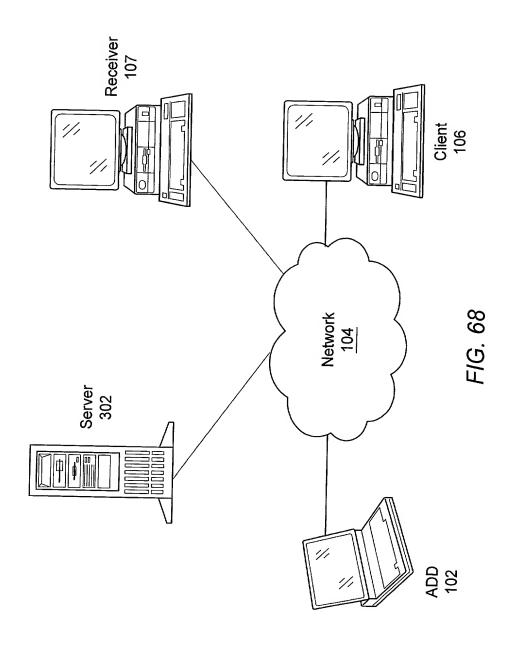


FIG. 67





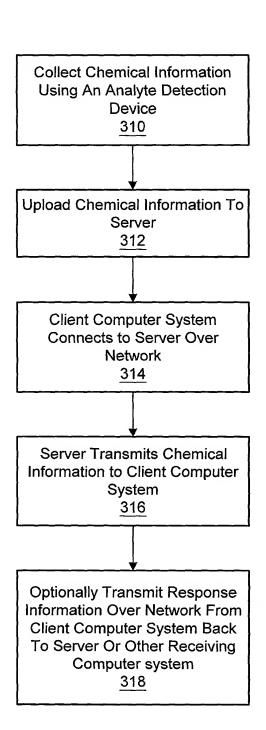


FIG. 69





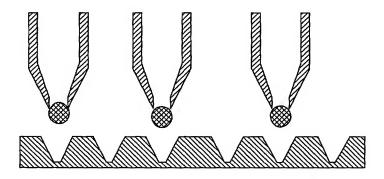


FIG. 70A

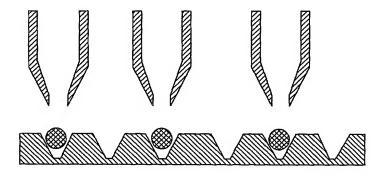


FIG. 70B

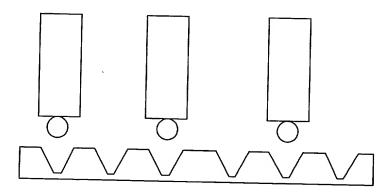


FIG. 71A

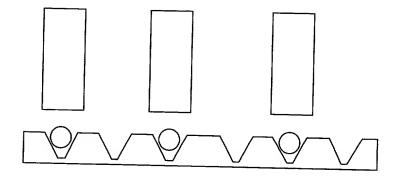


FIG. 71B



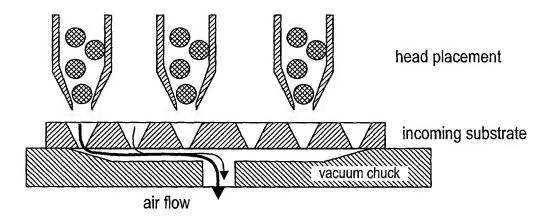


FIG. 72A

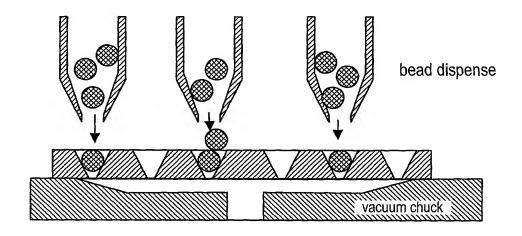


FIG. 72B



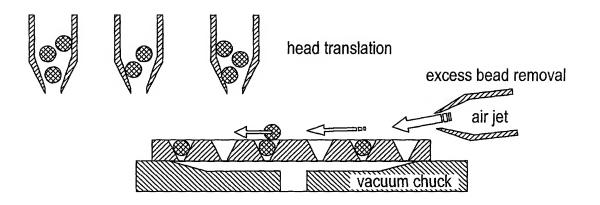


FIG. 72C

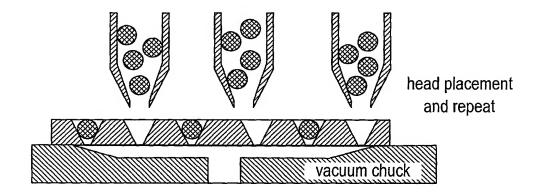


FIG. 72D

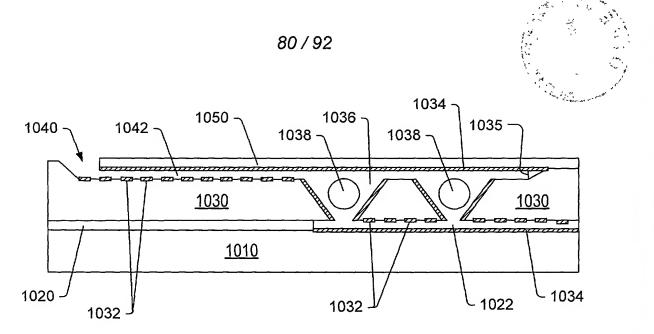


FIG. 73

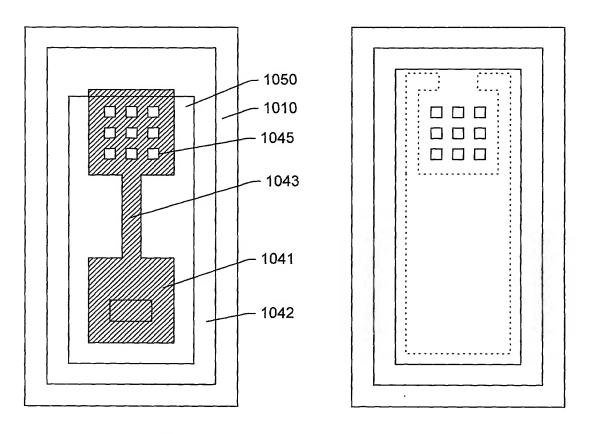
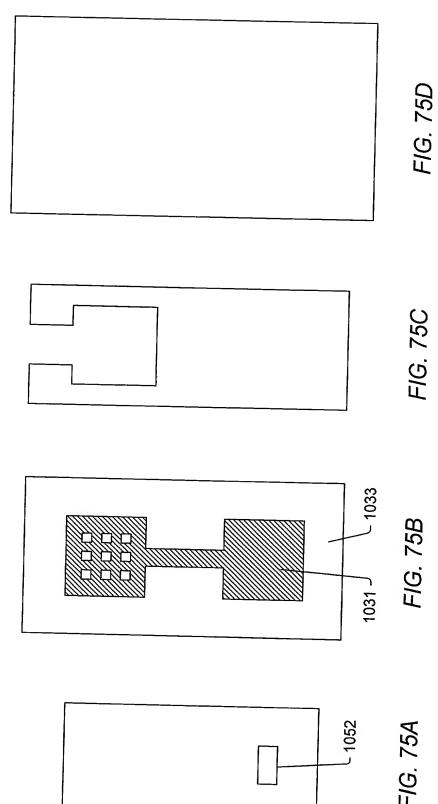


FIG. 74A

FIG. 74B



81/92

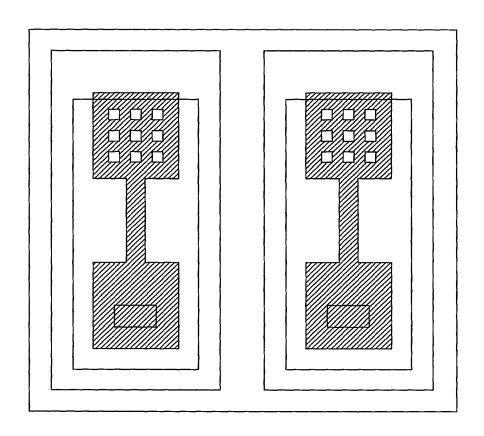
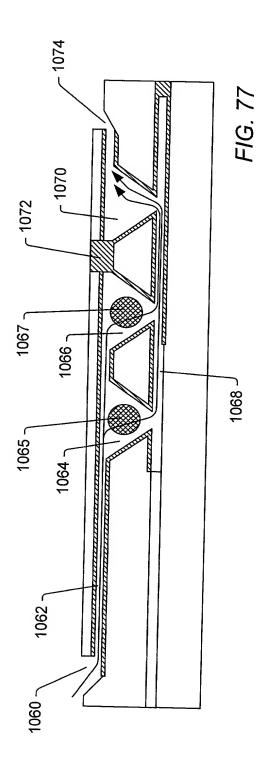
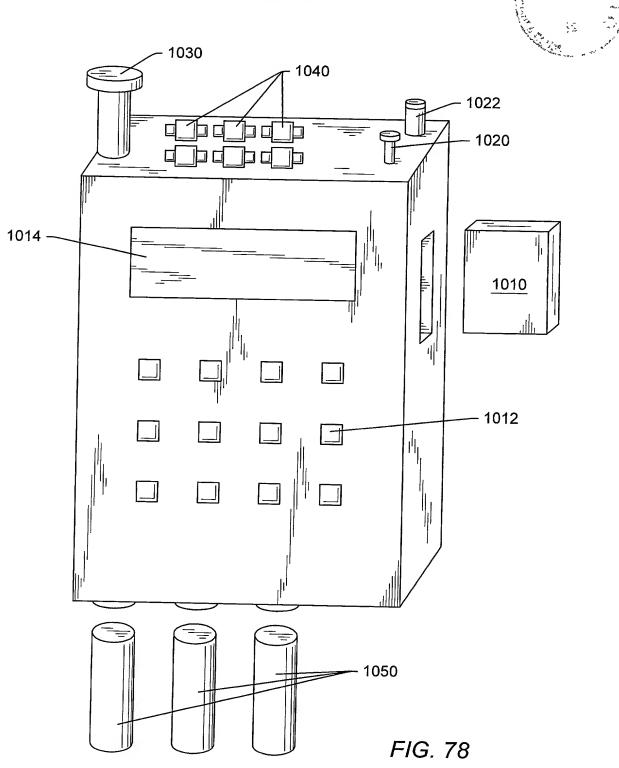
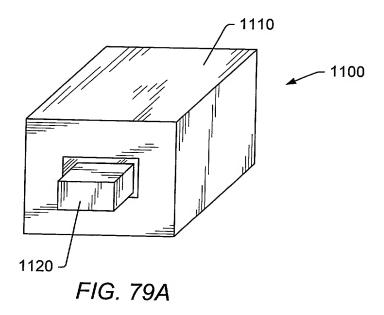


FIG. 76









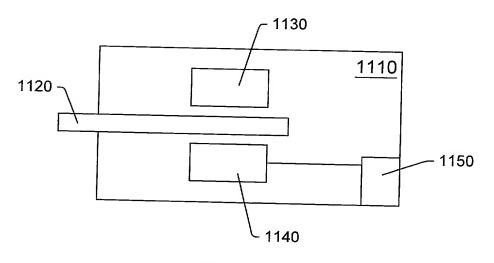
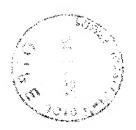
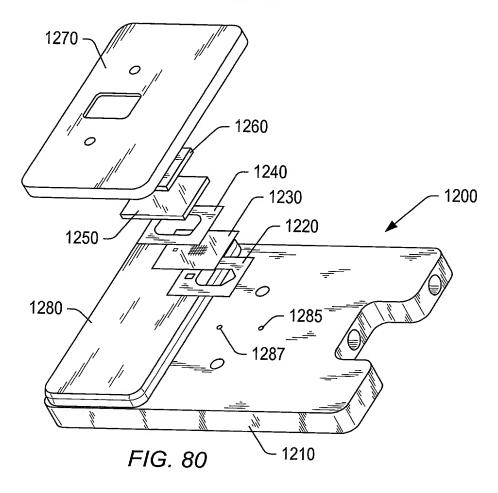
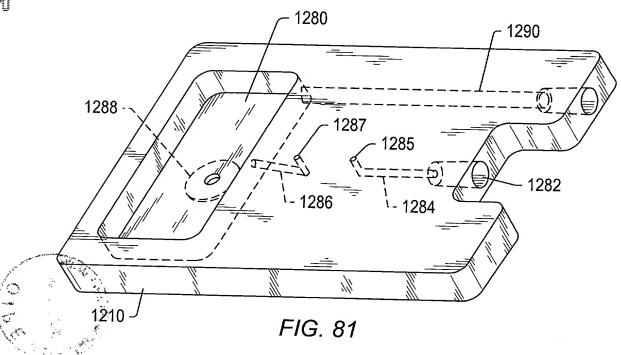


FIG. 79B









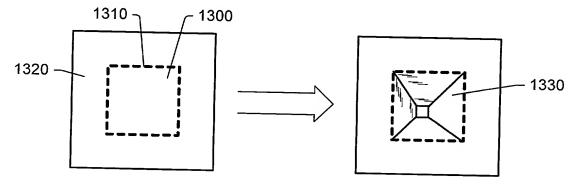


FIG. 82A

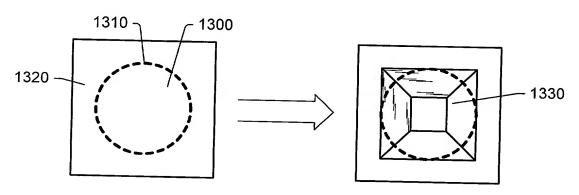
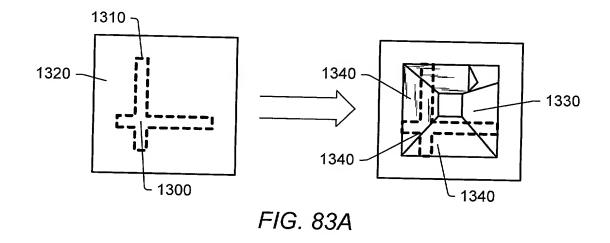
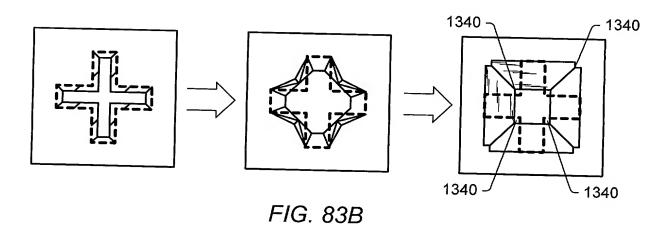


FIG. 82B









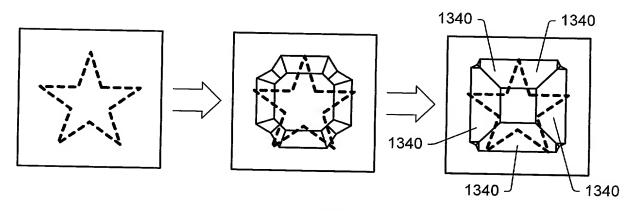


FIG. 84A

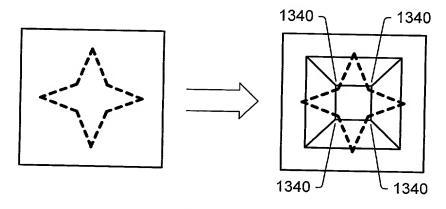


FIG. 84B

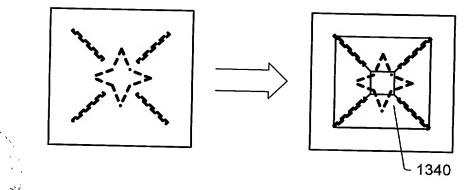


FIG. 84C

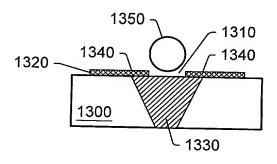


FIG. 85A

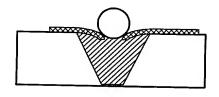


FIG. 85B

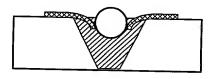


FIG. 85C

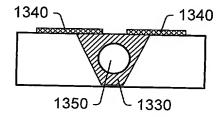
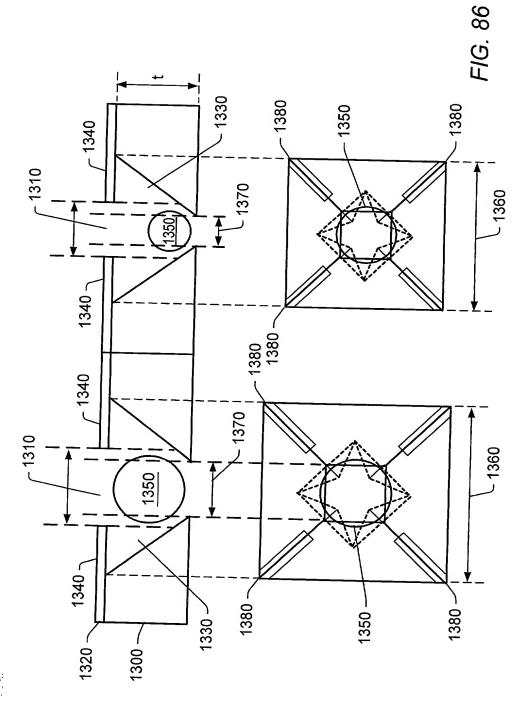
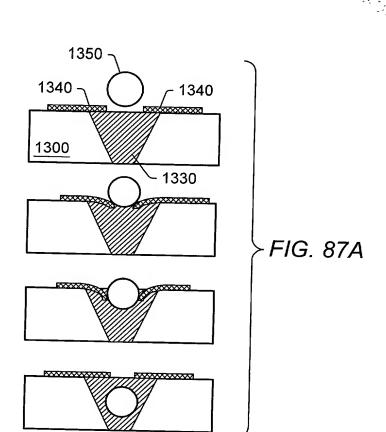


FIG. 85D









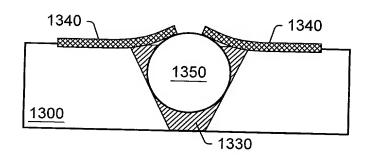


FIG. 87B